

## FLUMINICOLA MINUTISSIMA n. sp. Plate IX, fig. 1.

The shell is perforate, obliquely globose, thin, smooth, olivaceous yellowish, composed of three rapidly enlarging whorls, which are convex, and separated by an impressed suture, which becomes very deep in the last half-whorl. The spire is very short, the summit obtuse, the first whorl being nearly flat. The last whorl enlarges rapidly, and is well rounded peripherally, less so below; its last half descends rapidly. The aperture is quite oblique, nearly circular, but is angular above. The outer lip is thin, distinctly retracted at the upper insertion; the slightly concave columella is very strongly calloused within, flattened on the face. Below the umbilical perforation there is a narrow, crescentic, slightly excavated area, bounded outwardly by a low angle.

Alt. 1.5, diam. 1.75 mm.

Price Valley, Weiser Canyon, Washington Co., Idaho. Types no. 94273 A. N. S. P., collected by the Rev. E. H. Ashmun.

This species is smaller than any other of the genus, and is further distinguished by its very short spire and the rapid descent of the last half whorl. The columellar callus is unusually heavy for so small a shell.

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 SHELLS COLLECTED IN NORTHEASTERN MEXICO.
 

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BY A. A. HINKLEY.

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## BULIMULIDÆ.

*Oxystyla princeps* Brod. Tampico and Valles. Only dead specimens secured.

## UROCOPTIDÆ.

*Macroceramus mexicanus* Martens. El Abra.

*Holospira hinkleyi* Pils. El Abra, on the mountain side with *Opeas*.

## PUPILLIDÆ.

*Strobilops hubbardi* A. D. Brown. Tampico, scarce in drift.

*Pupoides marginatus* Say. Tampico, drift.

*Bifidaria contracta* Say. Tampico, drift, the most abundant species.

*Bifidaria pellucida* Pfr., var. *hordeucella* Pils. Tampico, drift, almost as numerous as *B. contracta*.

*Bifidaria procera* Gld. Tampico, found under pieces of wood in an open field, also in the drift.

*Vertigo milium* Gould. Tampico, two specimens in the drift.

## ACHATINIDÆ.

*Opeas gracile* Hutton. El Abra, plentiful on the mountain side.

*Opeas beckianum* Pfr. Tampico, drift.

*Opeas micra* Orb. Tampico, drift.

*Leptinaria tamaulipensis* Pils. Tampico, scarce in the drift.

*Leptinaria mexicana* Pfeiffer. Tampico, drift.

*Spiraxis tampicoensis* Pils.<sup>1</sup> Tampico, drift, numerous.

*Ceciloides* (*Cæcilianopsis*) *jod* Pils. Tampico, drift.

## OLEACINIDÆ.

*Euglandina corneola* Binn. Valles, a few dead ones.

*Euglandina texasiana* Pfr. Tampico and Valles, found about decaying logs, the most plentiful species of this family. Pilsbry says "Not *G. turris*. I find that they agree fully with Texas examples."

*Euglandina* sp. Valles.

*Streptostyla gracilis* Pils. Tampico and Valles, dead specimens.

*Salasiella joaquinæ* Strebel. El Abra, one specimen.

## ZONITIDÆ.

*Guppya elegans* Strebel. Tampico, a few in the drift.

*Zonitoides minuscula* Binney. Tampico, numerous in the drift.

*Zonitoidesingleyana* Pils. Tampico, common in the drift.

*Zonitoides pentagyra* Pils. Tampico, drift.

*Zonitoides elegantula* Pfr. Tampico, drift. This minute species was not plentiful. Pilsbry says "This is *Helix elegantula* Pfr., very badly figured as *Chanomphalus elegantulus*, by Strebel. Hitherto not known north of Vera Crnz. It has about the size and general appearance of a *Radiodiscus*, but the embryonic whorl is without spiral striæ."

## LIMACIDÆ.

*Agriolimax* sp. undet. Valles, scarce.

## ENDODONTIDÆ.

*Pyramidula victoriana* Pils. Tampico, in the drift, mostly immature examples.

<sup>1</sup>This species appears to belong to the genus *Calostele*, which has not hitherto been known in America.—ED.

## SUCCINEIDÆ.

*Succinea luteola* Gould. In the vicinity of Tampico this species was numerous in a pasture; near Valles they were found along the wagon road, but more plentiful on a railroad embankment. They are richly colored, reddish with pale and dark streaks; some albino specimens were taken.

*Succinea luteola* Gld., var. *subtilis* Marts. Valles; only two examples taken.

*Succinea* sp. Tampico. Found in a loose pile of decaying vegetation and on the skull of a cow. The specimens taken are not quite as large as *S. luteola*, and are thinner.

## VERONICELLIDÆ.

*Veronicella* sp. Valles; scarce, in shaded places.

## CYCLOSTOMATIDÆ.

*Adelopoma stollii* Martens. Tampico. A single specimen found in the drift. Pilsbry says "This small species was described by Prof. Von Martens as *Diplommatina stollii*. This example is a little smaller than typical *stollii*, with weaker ribs and less swollen penult. whorl. The last whorl is gibbous above the columella, a character not noticed by Von Martens in his description of *stollii*. The number of riblets is about the same as in *stollii*, or perhaps somewhat greater. Until further examples are found the value of these differences from *stollii* is uncertain."

## LYMNÆIDÆ.

*Lymnæa cubensis* Pfr. Valles. Taken from a pool by the roadside.

*Planorbis cultratus* Orb. Tampico. This small flat species was noticed in but one place; they were taken from the edge and underside of a piece of board and other driftwood lying on the land near the edge of a small pond. A few *Seg. obstructa* were taken with them.

*Planorbis liebmanni* Dkr. Tampico and Valles; only dead specimens found in river débris.

*Planorbis* sp. Tampico. A very small form found in the drift.

*Segmentina obstructa* Morelet. Tampico and Valles. A common species in ponds; dead ones were numerous in places in the drift.

*Physa mexicana* Phil. Tampico and Valles. Young shells were numerous in some of the shallow pools, the larger ones being rather scarce.

*Physa osculans* Hald., var. *rhysa* Pils. Roadside pool near Valles with *Lym. cubensis*, the only place these two species were found. Differs from *P. mexicana* in having a more attenuate spire, one more whorl, and the body whorl is less inflated.

*Physa* sp. This is thicker than the *P. mexicana* and has the chestnut-colored callus within the outer lip, which in the larger examples shows at previous stages of growth.

*Ancylus excentricus* Morelet. Found on plants in Tamesi and Valles rivers; scarce; a fragile species.

## VALVATIDÆ.

*Valvata humeralis* Say. Valles river.

## AMNICOLIDÆ.

*Cochliopa riograndensis* Pils. & Ferr. Valles river. More elevated than *Valvata humeralis* and differs from it in having several colored spiral lines, giving it a striking resemblance to a small *Helix*. The operculum and teeth, examined by Dr. Pilsbry, show it to be correctly referred to *Cochliopa*. The aperture is angular above, thus differing from that of *Valvata*.

*Amnicola guatemalensis* C. & F. Tampico, on pieces of wood in ponds.

*Amnicola tryoni* Pilsbry. Tampico, drift; a smaller species than *guatemalensis*.

*Potamopyrgus coronatus* Pfr. Tamesi river, Tampico. The spines on the shoulder are well developed for so small a species.

*Potamopyrgus coronatus texanus* Pils. Valles river, only two examples secured, they do not show the spines.

*Paludestrina tampicoensis* Pils. & Hinkl. Tampico.

## MELANIIDÆ.

*Pachycheilus vallesi* Hinkley. Plentiful in the Valles river.

## UNIONIDÆ.

*Unio tampicoensis* Lea. Valles river.

*Unio popei* Lea. Valles river. Pilsbry says of these shells "I think they are correctly referred to *popei* Lea, as a variety. It differs from typical Texan *popei* in the dark nacre and the more distinct green rays. It is related also to *U. soledadensis* Crosse &

Fischer, but differs in the wide posterior end and the distinct rays. *U. soledadensis* was omitted by Simpson, evidently inadvertently. It should go in the *Synopsis* next to *U. popei*."

*Unio* sp. Valles river. The most plentiful *Unio* found. Dall referred it to *soledadensis*. Pilsbry says "A new species, related to *popei*, yet with some features of *U. medellinus*."

## CYRENIDÆ.

*Cyrena carolinensis* Bosc. Panuco river, Tampico; found but few.

*Cyrena germana* Prime. Panuco river, Tampico. A single example, more compressed, and lighter colored, but possibly intergrades with *carolinensis*.

*Pisidium singleyi* Sterki. Valles river; Valles and drift of Panuco river, Tampico.

*Eupera singleyi* Pils. Valles river, Valles; and Tamesi river, Tampico.

## MACTRIDÆ.

*Mulinia lateralis* Say. Panuco river.

## PELSENEER'S TREATISE ON MOLLUSCA.

A TREATISE ON ZOOLOGY, edited by E. Ray Lankester, PART V, MOLLUSCA, by Paul Pelseener, London, 1906. This admirable book, of 355 pages, should be studied by every conchologist, although it is not quite elementary, and some fundamental knowledge of zoölogy is required to fully understand it. The text is well illustrated by 301 figures, partly diagrammatic, many of them from Prof. Lankester's article "Mollusca" in the ninth edition of the *Encyclopedia Britannica*, 1883. It is interesting to note the considerable changes of classification from Lankester's article to the present book. The editor of the NAUTILUS may permit to cite the main groups here, side by side:

LANKESTER, 1883.  
 Branch A. Glossophora.  
 Class 1. Gastropoda.  
 Br. a. Isopleura.  
 Br. b. Anisopleura.  
 Class 2. Scaphopoda.  
 Class 3. Cephalopoda.  
 Br. a. Pteropoda.  
 Br. b. Siphonopoda.  
 Branch B. Lipocephala.  
 Class 1. Lamellibranchia.

PELSENEER, 1906.  
 Grade A. Isopleura.  
 Class I. Amphineura.  
 Grade B. Prorhipidoglossomorpha.  
 Class I. Gastropoda.  
 Class II. Scaphopoda.  
 Class III. Lamellibranchia.  
 Grade C. Siphonopoda.  
 Class I. Cephalopoda.